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DUST PROOF CAP FOR VEHICLE HUBS.

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1,066,613.

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Fig. 1.

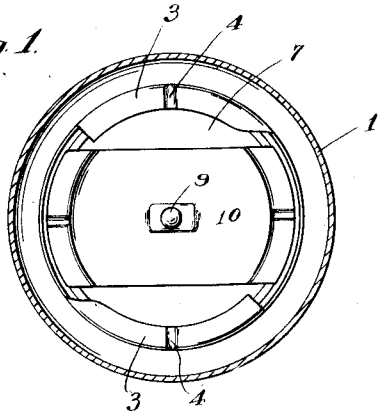



Fig. 3.

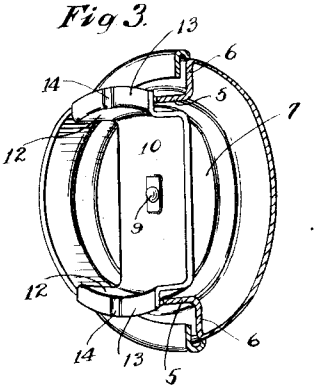



Fig. 2.

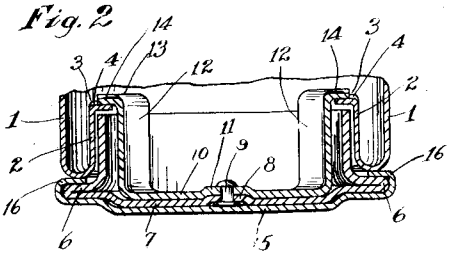
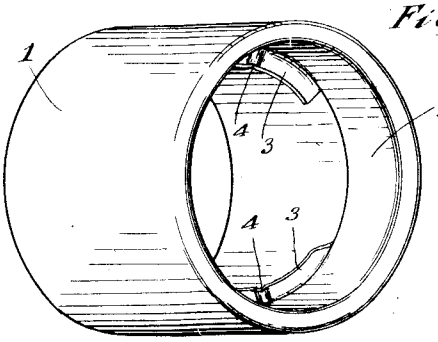



Fig. 4.




Witnesses

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# UNITED STATES PATENT OFFICE.

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## DUST-PROOF CAP FOR VEHICLE-HUBS.

1,066,613. Specification of Letters Patent. Patented July 8, 1913.

Application filed March 14, 1910. Serial No. 549,300.

*To all whom it may concern:*

Be it known that I, HENRY HIGGIN, a citizen of the United States, and a resident of the city of Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Dust-Proof Caps for Vehicle-Hubs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to caps for covering the bands of vehicle hubs to prevent the entrance of dust and dirt and to provide a neat and ornamental finish for the hub band, and it consists in that certain novel construction and arrangement of parts to be hereinafter particularly pointed out and claimed, whereby the dust-proof cap may be readily and easily secured and locked in place and readily and easily removed, when desired, without liability of jarring loose and in which a minimum number of parts are involved in the construction of the cap.

In the drawings, Figure 1 is an inside plan view of my improved construction with the point band in section and the parts in unlocked position. Fig. 2 is a central vertical section of the device with the hub band removed and the dust cap locked to the point band. Fig. 3 is a perspective view, with parts broken away, of the dust-proof cap. Fig. 4 is a perspective view of the point band for the hub.

1 is the point band of thin sheet metal which is usually expanded or otherwise secured by driving over the outer end of the hub, the hub not being illustrated in the drawing. This point band is turned inwardly to form the inner wall 2 to embrace the inner wall of the hub band in the usual way, to form a neat and rounded finish for the outer edge of the hub band. The inner edge of this point band is provided with a pair of oppositely disposed inwardly extending flanges 3, 3, which are indented on their under surfaces to form the locking points 4, 4, for the dust cap, illustrated by itself in Fig. 3.

The dust cap is constructed as follows: By means of dies and a series of operations which in themselves form no part of my present invention, a circular blank of suitable sheet metal is formed first into a cup, then expanded uniformly at the base, and then by a third operation this expanded portion is pressed together to form a double flange 6, while the body of the blank thus treated forms with its side wall the annular band portion 5 and with its bottom the disk plate portion 7. At the center of this plate 7 an oblong depression 8 is formed and by means of a suitable rivet 9, a U-shaped metallic strip 10 is riveted thereto, a similar depression 11 being formed in the center of the U-shaped strip for engagement with the part 8 to prevent the strip from turning when riveted.

12, 12, are the inwardly extending arms of the U-shaped strip, and at the inner ends these arms are bent outwardly to form the opposite flanges 13, 13, which are raised at their middle portion at 14, 14, and the arms 12, 12, are of such a length that the flanges 13, 13, can engage under the flanges 3, 3, of the point band when the dust cap is pushed to place.

15 is a sheet metal cover disk or plate which may be ornamented or plain, as desired, which covers the disk 7, and this plate has its outer edges bent over at 16 to embrace and clamp the outer edge of the flange 6 of the cap construction. The outer cover plate 15 thus covers up the rivet 9 and, as stated, any desired ornamental finish can be given the cover plate.

In order to secure the dust cap in place, the point band being permanently secured to the hub, the dust cap is inserted within the point band with the flanges 13, 13, between the flanges 3, 3, of the point band, and the cap is then turned bringing the flanges 13, 13, underneath the flanges 3, 3, and the rotation is continued until the ridges 14, 14, engage within the indentations or notches 4, 4, on the flanges of the point band, thus securely locking the dust cap to the point band and hub. The flanges 3, 3, and 13, 13, are resilient to a certain extent, so that when the notches 4, 4, and 14, 14, are brought into engagement, the cap is securely locked in place. The cap, however, can be readily removed by reversing the operation.

The engaging spring flanges have the effect of drawing the cap tightly and snugly against the rounded outer edge of the point band, so that when the cap is in place, the point band and cap appear as a single piece. At the same time, this closeness of fit enables me to provide an absolutely dust-proof cap.

What I claim as new, and of my invention and desire to secure by Letters Patent, is:—

1. In a device of the character specified, a point band adapted to be forced upon and secured over the hub band of a vehicle wheel, and provided with an inner and an outer wall, with opposite portions of the inner wall bent over at right angles to the body of the wall to form oppositely disposed, inwardly projecting resilient flanges, and a dust cap flanged to fit within the point band, provided with a metal strip secured to said cap at its central portion only, said strip having outwardly extending resilient flanges to engage under the opposing flanges of the point band to lock the cap in place and to hold it resiliently in position.

2. In a device of the character specified, a point band adapted to be forced upon and secured over the hub band of a vehicle wheel, and provided with an inner and an outer wall, with opposite portions of the inner wall bent over at right angles to the body of the wall to form oppositely disposed, inwardly projecting resilient flanges, having indentations in their middle portion, and a dust cap flanged to fit within the point band, provided with a metal strip secured to said cap at its central portion only, said strip having outwardly extending resilient flanges to engage under the opposing flanges of the point band, with ribs on said flanges to engage the indentations of the point band flanges to lock the parts together.

3. In a device of the character specified, a point band adapted to be forced upon and secured over the hub band of a vehicle wheel, and provided with an inner and an outer wall, with opposite portions of the inner wall bent over at right angles to the body of the wall to form oppositely disposed, inwardly projecting resilient flanges, having indentations in their middle portion, and a dust cap flanged laterally and at right angles thereto to fit both within and over the point band, provided with a metal strip secured to said cap at its central portion only, said strip having outwardly extending resilient flanges to engage under the opposing flanges of the point band, with ribs on said flanges to engage the indentations of the point band flanges to lock the parts together.

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Witnesses:
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